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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/847,395      | 05/03/2001  | Marc M. Rehfeld      | 206748US3           | 6479             |

22850            7590            12/15/2003  
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
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ALEXANDRIA, VA 22314

|                      |              |
|----------------------|--------------|
| EXAMINER             |              |
| FERGUSON, LAWRENCE D |              |
| ART UNIT             | PAPER NUMBER |
| 1774                 | (Signature)  |

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

CD18

|                              |                     |                |
|------------------------------|---------------------|----------------|
| <b>Office Action Summary</b> | Application No.     | Applicant(s)   |
|                              | 09/847,395          | REHFELD ET AL. |
|                              | Examiner            | Art Unit       |
|                              | Lawrence D Ferguson | 1774           |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 September 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3, 7 and 10-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1, 7 and 12-13 is/are rejected.
- 7) Claim(s) 2,3,10 and 11 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Response to Amendment***

1. This action is in response to the amendment mailed September 30, 2003. Claims 10-13 were added rendering claims 1-3, 7 and 10-13 pending.

### ***Claim Rejections – 35 USC § 103(a)***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

~~Marc Marc~~ Rehfeld et al. (U.S. 5,478,615).

Rehfeld '615 discloses a laminated glazing with a plastic interlayer having properties of acoustic insulation (column 7, lines 28-35) where the glazing has two glass sheets having an interlayer (column 7, lines 34-35). Rehfeld '615 discloses the interlayer is a polymeric film (column 4, lines 59-65). Rehfeld does not explicitly disclose the glass thickness or intermediate thickness is equal to  $d_{ref} J_{ref}/J_c$ . The thickness of the intermediate layer is optimizable and directly affects and enhances the damping property of the laminated glass pane. It would have been obvious to one of ordinary skill in the art to optimize the glass and intermediate layers because discovering an optimum

value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215. Additionally, Rehfeld '615 discloses varying the glass thickness (column 2, lines 1-10).

***Claim Rejections – 35 USC § 103(a)***

4. Claims 1, 7 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al (U.S. 5,908,704).

Friedman discloses two protective glazing layers with at least one interlayer having at least one reinforcement layer embedded in the polymer interlayer (column 14, lines 11-16) where the interlayer is fiber (column 14, lines 27-29). The reference discloses the interlayer is a polymeric film (column 1, lines 10-11 and column 2, lines 31-48) and the laminate comprises mechanical strength (column 3, lines 7-15). Friedman discloses additives incorporated in the laminate to achieve special properties in the protective glazing (column 4, lines 50-53) such as acoustic insulation. Friedman does not explicitly disclose the glass thickness or intermediate thickness is equal to  $d_{ref}$   $J_{ref}/J_c$ . The thickness of the intermediate layer is optimizable and directly affects and enhances the damping property of the laminated glass pane. It would have been obvious to one of ordinary skill in the art to optimize the glass and intermediate layers because discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 USPQ 215.

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5. Claims 2-3 and 10-11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments of rejection under 35 U.S.C. 103(a) as being unpatentable over Marc Rehfeld (U.S. 5,773,102) in view of Marc Rehfeld et al. (U.S. 5,478,615) are moot based on grounds of new rejection. Applicant's arguments of rejection under 35 U.S.C. 103(a) as being unpatentable over Marc Rehfeld (U.S. 5,773,102) in view of Garnier et al. (U.S. 6,074,732) are moot based on grounds of new rejection. Applicant's arguments of rejection under 35 U.S.C. 103(a) as being unpatentable over Marc Rehfeld (U.S. 5,773,102) in view of Marc Rehfeld et al. (U.S. 5,478,615) further in view of Friedman et al (U.S. 5,908,704) are moot based on grounds of new rejection.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the

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examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.

Lawrence D. Ferguson  
Examiner  
Art Unit 1774

CYNTHIA H. KELLY  
SUPERVISORY EXAMINER  
TELE 308-0449 FAX 308-2351

